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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/004,458	10/23/2001	Thomas Fung	2875.0440001	6843
26111 7590 05/04/2009 STERNE, KESSLER, GOLDSTEIN & FOX P.L.L.C. 1100 NEW YORK AVENUE, N.W. WASHINGTON, DC 20005				
EXAMINER				
POPHAM, JEFFREY D				
ART UNIT		PAPER NUMBER		
2437				
MAIL DATE		DELIVERY MODE		
05/04/2009		PAPER		

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

**Advisory Action  
Before the Filing of an Appeal Brief**

**Application No.**

10/004,458

**Applicant(s)**

FUNG ET AL.

**Examiner**

JEFFREY D. POPHAM

**Art Unit**

2437

**--The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

THE REPLY FILED 17 April 2009 FAILS TO PLACE THIS APPLICATION IN CONDITION FOR ALLOWANCE.

1. ☒ The reply was filed after a final rejection, but prior to or on the same day as filing a Notice of Appeal. To avoid abandonment of this application, applicant must timely file one of the following replies: (1) an amendment, affidavit, or other evidence, which places the application in condition for allowance; (2) a Notice of Appeal (with appeal fee) in compliance with 37 CFR 41.31; or (3) a Request for Continued Examination (RCE) in compliance with 37 CFR 1.114. The reply must be filed within one of the following time periods:

- a) ☐ The period for reply expires \_\_\_\_\_ months from the mailing date of the final rejection.  
b) ☒ The period for reply expires on: (1) the mailing date of this Advisory Action, or (2) the date set forth in the final rejection, whichever is later. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of the final rejection.  
Examiner Note: If box 1 is checked, check either box (a) or (b). ONLY CHECK BOX (b) WHEN THE FIRST REPLY WAS FILED WITHIN TWO MONTHS OF THE FINAL REJECTION. See MPEP 706.07(f).

Extensions of time may be obtained under 37 CFR 1.136(a). The date on which the petition under 37 CFR 1.136(a) and the appropriate extension fee have been filed is the date for purposes of determining the period of extension and the corresponding amount of the fee. The appropriate extension fee under 37 CFR 1.17(a) is calculated from: (1) the expiration date of the shortened statutory period for reply originally set in the final Office action; or (2) as set forth in (b) above, if checked. Any reply received by the Office later than three months after the mailing date of the final rejection, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**NOTICE OF APPEAL**

2. ☐ The Notice of Appeal was filed on \_\_\_\_\_. A brief in compliance with 37 CFR 41.37 must be filed within two months of the date of filing the Notice of Appeal (37 CFR 41.37(a)), or any extension thereof (37 CFR 41.37(e)), to avoid dismissal of the appeal. Since a Notice of Appeal has been filed, any reply must be filed within the time period set forth in 37 CFR 41.37(a).

**AMENDMENTS**

3. ☐ The proposed amendment(s) filed after a final rejection, but prior to the date of filing a brief, will not be entered because  
(a) ☐ They raise new issues that would require further consideration and/or search (see NOTE below);  
(b) ☐ They raise the issue of new matter (see NOTE below);  
(c) ☐ They are not deemed to place the application in better form for appeal by materially reducing or simplifying the issues for appeal; and/or  
(d) ☐ They present additional claims without canceling a corresponding number of finally rejected claims.

NOTE: \_\_\_\_\_. (See 37 CFR 1.116 and 41.33(a)).

4. ☐ The amendments are not in compliance with 37 CFR 1.121. See attached Notice of Non-Compliant Amendment (PTOL-324).  
5. ☐ Applicant's reply has overcome the following rejection(s): \_\_\_\_\_.  
6. ☐ Newly proposed or amended claim(s) \_\_\_\_\_ would be allowable if submitted in a separate, timely filed amendment canceling the non-allowable claim(s).  
7. ☒ For purposes of appeal, the proposed amendment(s): a) ☐ will not be entered, or b) ☒ will be entered and an explanation of how the new or amended claims would be rejected is provided below or appended.  
The status of the claim(s) is (or will be) as follows:  
Claim(s) allowed: \_\_\_\_\_.  
Claim(s) objected to: \_\_\_\_\_.  
Claim(s) rejected: 1-4, 8-12, 14-16, 18, 22-24 and 26.  
Claim(s) withdrawn from consideration: \_\_\_\_\_.

**AFFIDAVIT OR OTHER EVIDENCE**

8. ☐ The affidavit or other evidence filed after a final action, but before or on the date of filing a Notice of Appeal will not be entered because applicant failed to provide a showing of good and sufficient reasons why the affidavit or other evidence is necessary and was not earlier presented. See 37 CFR 1.116(e).  
9. ☐ The affidavit or other evidence filed after the date of filing a Notice of Appeal, but prior to the date of filing a brief, will not be entered because the affidavit or other evidence failed to overcome all rejections under appeal and/or appellant fails to provide a showing a good and sufficient reasons why it is necessary and was not earlier presented. See 37 CFR 41.33(d)(1).  
10. ☐ The affidavit or other evidence is entered. An explanation of the status of the claims after entry is below or attached.

**REQUEST FOR RECONSIDERATION/OTHER**

11. ☒ The request for reconsideration has been considered but does NOT place the application in condition for allowance because:  
See Continuation Sheet.  
12. ☐ Note the attached Information Disclosure Statement(s). (PTO/SB/08) Paper No(s). \_\_\_\_\_.  
13. ☐ Other: \_\_\_\_\_.

/Emmanuel L. Moise/  
Supervisory Patent Examiner, Art Unit 2437

/Jeffrey D Popham/  
Examiner, Art Unit 2437

Continuation of 7. The claims would be rejected in the same manner as in the final office action dated 2/17/2009, as the amendments have been made to correspond to the Examiner's interpretation of the claims provided with respect to the objections.

Continuation of 11. does NOT place the application in condition for allowance because: Applicant appears to separately argue that each of Nakaya, Yamaura, and Ghaffari do not disclose moving a first interrupt indicator, wherein moving the first interrupt indicator comprises setting the first interrupt indicator associated with the younger control record to disabled and setting the second interrupt indicator associated with the older control record to enabled. First noted is that no single reference need teach the entirety of a claim or limitation that is rejected based upon a 103 rejection using a combination of references. Therefore, one must look at the combination, as a whole, instead of applying piece-meal analysis to the references. Nakaya's teachings will be discussed with respect to each of Yamaura and Ghaffari below, and need not be separately discussed, as the final office action makes clear what is taught in Nakaya and what is not taught in Nakaya.

Yamaura discusses the enabling and disabling of interrupts via masking. The mask flag which enables or disables an interrupt is found in the interrupt controller (as one can see, this interrupt controller is equivalent to the interrupt controller 5000 found within Nakaya, figure 1, for example). Use of this mask flag will either enable the interrupt for being issued or disable the interrupt from being issued. Nakaya is directed to the delaying of interrupts until processing for all parallel computing parts of a particular set is completed. Therefore, Nakaya wishes for an interrupt to not be generated immediately upon completion of processing of a parallel computing part. Yamaura teaches how this is accomplished, via the enabling and disabling of interrupts through masking and the mask flag. In the combination, one will see that the mask flag will be set such that the interrupt is disabled upon completion of parallel computing parts in order to prevent the interrupt from being issued at this time. Nakaya teaches that, once all parallel computing parts of a set are processed, interrupts may then be generated. In the combination, one will note that, in order for an interrupt to be issued, the mask flag must be set such that the interrupt is enabled and can be issued. Therefore, the only way for the proper issuing of interrupts once processing is complete for all parallel computing parts of the set to proceed is by an interrupt being enabled via the mask flag of Yamaura. In other words, at least one interrupt will be enabled by use of the mask flag of Yamaura upon completion of the processing of all parallel computing parts of Nakaya, so that the proper interrupt(s) will be issued. Taking the combination, as a whole, the allowance and disallowance of interrupt issuance is provided via the mask flag of Yamaura, and the time at which interrupts are allowed to be issued or disallowed from being issued is provided via the parallel and serial processing of Nakaya.

With respect to Applicant's arguments regarding the moving of a first interrupt indicator as being a two step process, it is noted that this process need not occur all at once. Each step could be performed chronologically apart from the other. Therefore, the disabling of the first interrupt indicator and the enabling of the second interrupt indicator need not be done in one atomic process. The disabling of the first interrupt indicator may occur as processing of the first data completes or anytime thereafter, and the enabling of the second interrupt indicator may occur at the same time, when processing of the second data completes, or at another time (e.g. once processing of the set of parallel computing parts in Nakaya is done being processed). Therefore, one will note that the disabling of a first interrupt indicator within the claims could occur upon completing processing of the first data, and the enabling of a second interrupt indicator could occur upon completing processing of the second data, thereby resulting in an interrupt being generated upon enabling of this second interrupt indicator.

As seen in Ghaffari, the Command Chaining field is used to determine whether an interrupt should be generated after processing completes for a particular command. If this Command Chaining field is set, an interrupt is generated when the operation is complete, but if the Command Chaining field is clear, then an interrupt is not generated when the operation is complete. When viewing this teaching in light of the parallel processing of Nakaya, one will readily note the correspondence between the Command Chaining field of Ghaffari and the parallel processing features of Nakaya. In the combination, when a command is a parallel computing part, it will be processed by a processor of Nakaya, and other parallel computing parts of the parallel computing part set will be processed by other processors. Nakaya makes it clear that no interrupt is to be generated until after the processing of all of these parallel computing parts completes. Ghaffari teaches a mechanism by which this may be performed; the Command Chaining field. In the combination, this Command Chaining field will be cleared for parallel computing parts, such that an interrupt is not generated immediately after the command is processed. Ghaffari further teaches that this Command Chaining field is within the command block.